Abstracts

Nonreciprocal Effects in Semiconductor Loaded Waveguide at Millimeter Wavelengths

E.M. Godshalk and F.J. Rosenbaum. "Nonreciprocal Effects in Semiconductor Loaded Waveguide at Millimeter Wavelengths." 1984 MTT-S International Microwave Symposium Digest 84.1 (1984 [MWSYM]): 455-456.

Nonreciprocal propagation in a waveguide partially loaded with a semiconductor slab in a transverse D.C. magnetic field at 92 GHz is investigated . A model was developed to predict the propagation characteristics and experiments were conducted for comparison. Experimental data for a Si semiconductor slab are reported, which show increased nonreciprocal attenuation when carrier mobility is increased.

❑ Return to main document.